10

## **CLAIMS**

What is claimed is:

- An on-screen-display OSD for controlling a cutoff circuit, comprising:
   an OSD circuit for receiving an RGB cutoff signal parameters and generating
   an RGB OSD video signal;
- a video mixer for receiving an RGB video signal and the RGB OSD video signal, mixing the RGB video signal and the RGB OSD video signal generating a mixed RGB cutoff signal;

a cutoff circuit coupled to a CRT receiving the mixed RGB cutoff signal to adjust the brightness level of the CRT for aging whereby the mixed RGB cutoff signal includes a brightness component to set the brightness of the CRT during aging.

- The apparatus according to claim 1, further comprising:
   a variable control not coupled to the video mixer for setting a threshold brightness level of the CRT.
- 15 3. The apparatus according to claim 2, wherein the variable control comprises a variable resistor adjusted to a preset brightness level.
  - 4. The apparatus according to claim 1, further comprising:a microcontroller device for generating said RGB cutoff signal parameters.
- 5. The apparatus according to claim 4, wherein said parameters generated by the microcontroller including raster size, raster shape and raster distortion.

15

- 6. The apparatus according to claim 4, wherein the microcontroller presets the OSD device for aging.
- The apparatus according to claim 1, further comprising:

   a microcontroller for sending RGB parameters via a bus to the OSD device

   configuring the CRT during aging, wherein the RGB parameters include raster size, position and distortion.
  - 8. The apparatus according to claim 7, further comprising; the microcontroller initializing a contrast setting of the OSD circuit.
  - The apparatus of claim 7, further comprising:
     the microcontroller initializing a character setting of the OSD circuit.
  - 10. The apparatus of claim 7, further comprising: the microcontroller initializing a position setting of the OSD circuit.
  - 11. An apparatus for controlling aging, comprising:
    a microcontroller generating brightness level data to a video input signal for aging of the cathode ray tube;
  - a video preamplifier connected to the microcontroller receiving the brightness level data by the video input signal and mixing a host video signal to generate a video output signal wherein the brightness level of the video output signal being controlled by the microcontroller;
- a cutoff control coupled to the video preamplifier receiving brightness data of the video output signal and setting a proper brightness level of a cathode; and
  - a voltage control not coupled to the microcontroller preset for a an initial brightness level of the cathode during aging.

- 12. The apparatus according to claim 11, further comprising:
  a bus connector receiving brightness data from the microcontroller and connected to at least the video preamplifier.
- 13. The apparatus according to claim 12, further comprising:
  a drive amplifier connected to the video preamplifier to amplify the video output signal to the cathode.
  - 14. The apparatus according to claim 11, further comprising:
    the microcontroller generating a test pattern for controlling the video
    preamplifier wherein the test pattern setting the brightness level of the mixed output
    video signal
    - 15. The apparatus according to claim 11, further including: the microcontroller, video preamplifier, and OSD being formed on a single IC package.
- 16. The apparatus according to claim 13, further comprising:
  a defection device connected via the bus connector to at least the microcontroller receiving synchronized horizontal and vertical signals.
  - 17. A method for controlling aging, comprising:
    generating using a microcontroller brightness level data for aging of the cathode to a video input signal;
- receiving brightness level data by a video preamplifier connected to the microcontroller and mixing a video input signal and a host video signal to generating a video output signal wherein the brightness level of the video output signal being controlled by the microcontroller;
- receiving brightness data of the video output signal to a cutoff control coupled to the video preamplifier and setting a proper brightness level of a cathode; and

15

presetting a voltage control not coupled to the microcontroller for a an initial brightness level of the cathode during aging.

- 18. The method according to claim 17, further comprising:

  generating a test pattern using the microcontroller for controlling the video
  preamplifier wherein the test pattern setting the brightness level of the mixed output
  video signal
  - 19. The apparatus according to claim 17, further including: forming on a single IC package the microcontroller, video preamplifier, and OSD.
- 10 20. An apparatus for controlling aging, comprising: a microcontroller means for generating brightness level data for aging of the cathode to a video input signal;

a video preamplifier means connected to the microcontroller means receiving the brightness level data by the video input signal and mixing a host video signal to generate a video output signal wherein the brightness level of the video output signal being controlled by the microcontroller means;

a cutoff control means coupled to the video preamplifier means receiving brightness data of the video output signal and setting a proper brightness level of a cathode; and

a voltage control means not coupled to the video preamplifier means preset for a an initial brightness level of the cathode during aging.